



UNE-P vs. 271 LD Entry:

What's the real tradeoff for the RBOCs?

Key steps for telecom policy

- Create competitive local telecom markets through:
 - Wholesale markets for unbundled network elements (251)
 - Priced at competitive compensatory levels (252)
- Allow previous local monopolists into long distance markets (271)
- Phase out regulation of retail services
- Provides a win-win-win solutions for ILECs, CLECs and customers

Complexities of revenue estimation

Component	Definition	Our data source(s)	Common estimation errors
Basic local \$13.78	Rate paid for line rental and local usage -- typically combined as 1FR	CCMI rates mapped to WC and rolled up by UNE zone	Figures that include business revenue with residence or reflect only high-end local service bundles
Features \$6.86	Revenues from sale of vertical features (e.g., Caller ID, Call Waiting, etc.) -- either as explicit separate charges or implicit within "Total Service" bundles	Study area estimate per HH from TNS Telecoms Bill Harvesting database	Figures that reflect only high use bundles or assume excessive "take" rates; inclusion of nonUNE-related features (ISW, VM)
Subsidies \$0.67	State and Federal USF subsidy payments as well as CALLS-related subsidy payments	Regulatory filing documents	Ignored, measured by collections rather than receipts, or entitlement not consistently associated with particular zone
SLC \$5.51	Interstate (and, occasionally intrastate) access end user charges -- typically to support loop costs	Analysis of TRP data	Intrastate may be neglected
Access \$1.99	Access revenue from unaffiliated IXCs or access savings (relative to UNE rates) enjoyed by affiliated IXCs	AT&T's estimate of access rates and TNS Telecoms Bill Harvesting derived toll minutes	Including business usage and/or dedicated transport
Total \$28.81	Sum of above components		Top-down figure that includes revenues not related to residential local service

Complexities of UNE-P cost estimation

Element	Definition	Common estimation errors	Examples of quirky practices
Loop \$13.29	Network Interface Device (NID), Distribution, FDI/DLC, Feeder	Use of UNE-L rate rather than UNE-P rate; use targeted zone rate or rates averaged across zones based on distribution of total lines rather than residence lines	Some Qwest states have multiple loop rates within a WC. Many BLS states have different rates for UNE-L loops vs. UNE-P loops.
Port/features \$2.06	Line connection to the switch and feature capability	Failure to include feature costs in port rate (flat or per-feature)	Texas applies 4 different port rates as a function of the number of lines in the local calling area served by the switch. CA charges \$0.19 extra per feature. Many BLS states have higher rates for ports with features (e.g., FL additive is \$2.26)
Switch Usage \$3.42 (figure includes transport and signaling charges)	Call attempt and holding time charges for the switch including trunk ports	Understated usage level and/or level not specific to the state	CA has 3 sets of set-up and duration charges for intraswitch, interswitch and terminating usage. Many VZ states apply 2 switching charges on intraswitch minutes.
Interoffice transport and signaling	Common transport, tandem switching and signaling	Ignored or understated	Signaling may be incorporated in switching rate
Daily Usage Feed/Files (DUF) \$0.50	Transmittal of information regarding usage data	Very difficult to measured, often ignored or understated	Based on number of usage records, rate and number of records may differ by call type
Miscellaneous \$0.06		White pages and OSS charges in some states -- invariably overlooked	
Nonrecurring costs \$0.30	Charges for new customer migration or install	Ignored or selected rate element inconsistent with customer mix	Rate structures very complex and idiosyncratic
Total UNE-P \$19.63			

Wholesale costs and revenues

Wholesale Costs of UNE-P to CLECs	Loop	Port	Usage	DUF	Misc	Amort of NRC	Total UNE-P
All RBOCs	\$13.29	\$2.06	\$3.42	\$0.50	\$0.06	\$0.30	\$19.63
BellSouth	\$15.14	\$2.33	\$3.69	\$1.72	\$0.00	\$0.18	\$23.07
Qwest	\$16.30	\$1.43	\$5.08	\$0.13	\$0.18	\$0.75	\$23.87
SBC	\$11.33	\$2.09	\$2.18	\$0.23	\$0.00	\$0.24	\$16.07
Verizon	\$13.49	\$2.10	\$4.32	\$0.18	\$0.14	\$0.28	\$20.51

Revenues Gained from Sale of UNE-P by CLECs	Basic	Features	Subsidies	SLC	Access	Total	Margin (\$)(%)	
All RBOCs	\$13.78	\$6.86	\$0.67	\$5.51	\$1.99	\$28.81	\$9.17	32%
BellSouth	\$13.29	\$8.90	\$0.88	\$6.00	\$1.20	\$30.26	\$7.19	24%
Qwest	\$14.41	\$7.00	\$0.45	\$5.75	\$2.13	\$29.74	\$5.86	20%
SBC	\$12.80	\$6.55	\$0.89	\$4.98	\$1.91	\$27.12	\$11.05	41%
Verizon	\$15.33	\$5.75	\$0.28	\$5.83	\$2.64	\$29.83	\$9.32	31%

Rates current as of 8/9/02

All RBOC post-271 Res analysis

	Total RBOC	BellSouth	Qwest	SBC	Verizon
Total Residential lines	84,547,824	16,937,608	10,459,763	34,341,186	22,809,266
Residential UNE-P Economics					
Retail revenue	\$28.81	\$30.26	\$29.74	\$27.12	\$29.83
Avoided retail cost	\$4.21	\$4.37	\$3.37	\$4.04	\$4.74
Net retail revenue loss	\$24.60	\$25.90	\$26.37	\$23.09	\$25.09
Wholesale UNE-P revenue	\$19.63	\$23.07	\$23.87	\$16.07	\$20.51
Lost margin per UNE-P line	\$4.96	\$2.83	\$2.50	\$7.02	\$4.58
UNE-P Res lines @ 15%	12,682,174	2,540,641	1,568,964	5,151,178	3,421,390
Annual margin lost from UNE-P	\$755,059,777	\$86,169,746	\$47,032,846	\$433,865,468	\$187,991,717
Residential RBOC LD Economics					
Retail revenue @ \$0.12	\$11.63	\$11.97	\$10.49	\$11.69	\$11.80
Incremental cost @ \$0.05	\$4.84	\$4.99	\$4.37	\$4.87	\$4.92
Gained margin per Res LD line	\$6.78	\$6.98	\$6.12	\$6.82	\$6.88
LD Res lines @ 30%	25,364,347	5,081,283	3,137,929	10,302,356	6,842,780
Annual margin gained from LD	\$2,064,101,561	\$425,696,161	\$230,439,930	\$842,909,710	\$565,055,760
Net UNE-P + LD Margin Change	\$1,309,041,784	\$339,526,416	\$183,407,083	\$409,044,242	\$377,064,043

All RBOC UNE-P vs. LD entry tradeoff

Data: All RBOCs Post-271 Total
 Total Residential lines 84,547,824
 Lost margin per UNE-P line \$4.96
 Gained margin per Res LD line \$6.78

Change in Net Margin Earned by the RBOCs (\$ Millions)

		Share of Residence Long Distance Gained by RBOC									
		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Share of Residence Lines Retained on UNE-P	10%	\$185	\$873	\$1,561	\$2,249	\$2,937	\$3,625	\$4,313	\$5,001	\$5,689	\$6,377
	20%	(\$319)	\$369	\$1,057	\$1,745	\$2,433	\$3,121	\$3,809	\$4,498	\$5,186	\$5,874
	30%	(\$822)	(\$134)	\$554	\$1,242	\$1,930	\$2,618	\$3,306	\$3,994	\$4,682	\$5,370
	40%	(\$1,325)	(\$637)	\$51	\$739	\$1,427	\$2,115	\$2,803	\$3,491	\$4,179	\$4,867
	50%	(\$1,829)	(\$1,141)	(\$453)	\$235	\$923	\$1,611	\$2,299	\$2,987	\$3,675	\$4,363
	60%	(\$2,332)	(\$1,644)	(\$956)	(\$268)	\$420	\$1,108	\$1,796	\$2,484	\$3,172	\$3,860
	70%	(\$2,836)	(\$2,148)	(\$1,460)	(\$771)	(\$83)	\$605	\$1,293	\$1,981	\$2,669	\$3,357
	80%	(\$3,339)	(\$2,651)	(\$1,963)	(\$1,275)	(\$587)	\$101	\$789	\$1,477	\$2,165	\$2,853
	90%	(\$3,842)	(\$3,154)	(\$2,466)	(\$1,778)	(\$1,090)	(\$402)	\$286	\$974	\$1,662	\$2,350
	100%	(\$4,346)	(\$3,658)	(\$2,970)	(\$2,282)	(\$1,594)	(\$906)	(\$217)	\$471	\$1,159	\$1,847

SBC “economics”

- SBC states that:
 - Its res UNE-P line loss stabilizes at between 15 and 20%
 - It sells LD
 - At prices \geq IXC rates (or at $\sim 50\%$ margins), and
 - targets attaining a 60 to 70% market share in 4-5 years
- These statements confirm the highly favorable nature of the UNE-P/LD tradeoff to SBC
- Thus in whole, the TelAct has been a boon to SBC, not a bust

Relative Margin Analysis	SBC
Total Residential lines	34,341,186
Residential UNE-P Economics	
Retail revenue	\$27.12
Avoided retail cost	\$4.04
Net retail revenue loss	\$23.09
Wholesale UNE-P revenue	\$16.07
Lost margin per UNE-P line	\$7.02
UNE-P Res lines @ 20%	6,868,237
Annual margin lost from UNE-P	\$578,487,291
Residential RBOC LD Economics	
Retail revenue @ \$0.12	\$11.69
Incremental cost @ \$0.06	\$5.84
Gained margin per Res LD line	\$5.84
LD Res lines @ 60%	20,604,712
Annual margin gained from LD	\$1,444,988,073
Net UNE-P + LD Margin Change	\$866,500,783

Conclusions

- RBOCs reveal that they gain more from LD than lose from UNE-P
 - In many states, RBOC pressure to receive 271 relief has spurred substantial UNE-P rate reductions – frequently as the result of unilateral RBOC price concessions
 - RBOC decisions to pursue 271 shows they believe LD entry to be richer than potential UNE-P losses
 - This is confirmed by our UNE-P/LD margin tradeoff analyses
- Viable UNE markets keep traffic on and investment in RBOC networks

UNE-P wholesale cost

Holding Company	State	Loop	Port	Usage	DUF	Misc	Amort of NRC	Total UNE-P
Bellsouth	AL	\$15.31	\$2.24	\$2.66	\$1.76	\$0.00	\$0.14	\$22.11
Southwestern Bell	AR	\$14.30	\$1.61	\$2.40	\$0.68	\$0.00	\$0.29	\$19.28
Us West	AZ	\$12.92	\$1.61	\$9.83	\$0.00	\$0.00	\$1.14	\$25.49
Pacific Telesis	CA	\$10.18	\$1.21	\$1.82	\$0.00	\$0.00	\$0.09	\$13.30
Us West	CO	\$16.61	\$1.53	\$3.91	\$0.22	\$0.00	\$0.13	\$22.40
Southern New England	CT	\$11.88	\$3.31	\$6.35	\$0.00	\$0.00	\$0.00	\$21.54
Bell Atlantic	DC	\$10.81	\$1.55	\$3.73	\$0.05	\$0.00	\$0.37	\$16.52
Bell Atlantic	DE	\$12.22	\$2.23	\$5.54	\$0.08	\$0.00	\$1.04	\$21.12
Bellsouth	FL	\$15.85	\$3.43	\$2.57	\$2.52	\$0.00	\$0.15	\$24.52
Bellsouth	GA	\$12.76	\$1.79	\$5.78	\$2.05	\$0.00	\$0.11	\$22.48
Us West	IA	\$16.79	\$1.15	\$4.85	\$0.25	\$1.38	\$0.18	\$24.59
Us West	ID	\$20.90	\$1.34	\$3.93	\$0.21	\$0.00	\$0.18	\$26.56
Ameritech	IL	\$9.80	\$2.11	\$0.61	\$0.08	\$0.00	\$0.08	\$12.69
Ameritech	IN	\$8.33	\$3.13	\$0.95	\$0.00	\$0.00	\$0.01	\$12.42
Southwestern Bell	KS	\$13.78	\$1.61	\$2.58	\$0.70	\$0.00	\$0.23	\$18.90
Bellsouth	KY	\$12.53	\$1.15	\$4.32	\$0.99	\$0.00	\$0.20	\$19.19
Bellsouth	LA	\$16.98	\$1.36	\$5.29	\$0.91	\$0.00	\$0.14	\$24.68
Nynex Svc Co	MA	\$15.33	\$2.00	\$7.30	\$0.00	\$0.00	\$0.09	\$24.71
Bell Atlantic	MD	\$14.94	\$1.90	\$6.49	\$0.09	\$0.00	\$0.19	\$23.62
Nynex Svc Co	ME	\$16.44	\$0.94	\$3.86	\$0.85	\$0.00	\$0.00	\$22.08
Ameritech	MI	\$10.09	\$2.53	\$1.10	\$0.12	\$0.00	\$0.05	\$13.90
Us West	MN	\$18.55	\$1.08	\$4.19	\$0.00	\$0.00	\$0.07	\$23.89
Southwestern Bell	MO	\$15.27	\$1.90	\$2.40	\$0.00	\$0.00	\$0.25	\$19.83
Bellsouth	MS	\$18.30	\$2.55	\$2.95	\$1.61	\$0.00	\$0.27	\$25.69
Us West	MT	\$23.72	\$1.58	\$6.88	\$0.26	\$0.00	\$0.17	\$32.61
Bellsouth	NC	\$14.61	\$2.19	\$4.17	\$0.92	\$0.00	\$0.19	\$22.08
Us West	ND	\$18.25	\$1.27	\$7.31	\$0.36	\$3.49	\$0.18	\$30.86
Us West	NE	\$17.47	\$2.47	\$5.33	\$0.23	\$2.52	\$0.16	\$28.19
Nynex Svc Co	NH	\$18.44	\$0.71	\$3.98	\$0.24	\$0.00	\$0.00	\$23.38
Bell Atlantic	NJ	\$9.52	\$1.91	\$2.10	\$0.37	\$0.00	\$0.33	\$14.24
Us West	NM	\$20.79	\$1.38	\$3.45	\$0.00	\$0.00	\$1.63	\$27.26
Pacific Telesis	NV	\$21.22	\$1.63	\$7.07	\$0.00	\$0.00	\$0.36	\$30.28
Nynex Svc Co	NY	\$12.12	\$2.57	\$2.39	\$0.22	\$0.54	\$0.28	\$18.12
Ameritech	OH	\$8.51	\$3.13	\$1.87	\$0.21	\$0.00	\$0.11	\$13.84
Southwestern Bell	OK	\$15.87	\$2.28	\$4.10	\$0.72	\$0.00	\$0.26	\$23.24
Us West	OR	\$15.43	\$1.14	\$2.92	\$0.00	\$0.00	\$3.26	\$22.75
Bell Atlantic	PA	\$14.23	\$2.67	\$3.26	\$0.08	\$0.00	\$0.23	\$20.47
Nynex Svc Co	RI	\$14.14	\$1.86	\$3.52	\$0.00	\$0.00	\$0.00	\$19.52
Bellsouth	SC	\$16.72	\$2.80	\$3.34	\$1.76	\$0.00	\$0.28	\$24.89
Us West	SD	\$21.26	\$1.84	\$4.57	\$0.00	\$0.00	\$7.15	\$34.82
Bellsouth	TN	\$14.41	\$1.70	\$2.72	\$1.16	\$0.00	\$0.27	\$20.26
Southwestern Bell	TX	\$14.33	\$2.22	\$3.13	\$0.88	\$0.00	\$0.17	\$20.74
Us West	UT	\$13.15	\$1.58	\$4.07	\$0.13	\$0.00	\$0.09	\$19.01
Bell Atlantic	VA	\$14.74	\$1.30	\$6.37	\$0.08	\$0.00	\$0.59	\$23.09
Nynex Svc Co	VT	\$13.81	\$0.96	\$8.31	\$0.86	\$0.00	\$0.00	\$23.94
Us West	WA	\$14.56	\$1.34	\$3.61	\$0.31	\$0.00	\$0.11	\$19.93
Ameritech	WI	\$10.90	\$3.71	\$2.62	\$0.19	\$0.00	\$3.57	\$20.99
Bell Atlantic	WV	\$26.72	\$1.60	\$16.57	\$0.10	\$0.00	\$0.66	\$45.64
Us West	WY	\$22.95	\$2.64	\$4.18	\$0.25	\$0.00	\$0.17	\$30.20

UNE-P associated revenue

Holding Company	State	Basic & Features	Subsidies	SLC	Access	Total	Margin (\$)	Margin (%)
Bellsouth	AL	\$25.32	\$1.72	\$6.00	\$0.85	\$33.89	\$11.78	35%
Southwestern Bell	AR	\$22.94	\$0.63	\$5.27	\$2.46	\$31.30	\$12.02	38%
Us West	AZ	\$21.06	\$0.91	\$6.00	\$1.74	\$29.71	\$4.22	14%
Pacific Telesis	CA	\$15.82	\$2.71	\$4.48	\$2.16	\$25.17	\$11.88	47%
Us West	CO	\$22.74	\$0.49	\$6.00	\$2.13	\$31.36	\$8.95	29%
Southern New England	CT	\$17.03	\$0.03	\$5.78	\$2.52	\$25.35	\$3.81	15%
Bell Atlantic	DC	\$20.15	\$0.00	\$3.86	\$0.00	\$24.01	\$7.49	31%
Bell Atlantic	DE	\$13.77	\$0.08	\$6.00	\$1.13	\$20.98	(\$0.13)	-1%
Bellsouth	FL	\$18.68	\$0.39	\$6.00	\$2.00	\$27.07	\$2.56	9%
Bellsouth	GA	\$26.27	\$0.35	\$6.00	\$0.79	\$33.41	\$10.93	33%
Us West	IA	\$18.04	\$0.00	\$4.72	\$1.85	\$24.61	\$0.03	0%
Us West	ID	\$20.42	\$0.00	\$6.00	\$2.56	\$28.98	\$2.42	8%
Ameritech	IL	\$23.53	\$0.00	\$4.49	\$0.77	\$28.79	\$16.10	56%
Ameritech	IN	\$19.31	\$0.00	\$5.52	\$0.91	\$25.74	\$13.31	52%
Southwestern Bell	KS	\$20.87	\$0.06	\$5.27	\$3.08	\$29.27	\$10.37	35%
Bellsouth	KY	\$24.21	\$0.46	\$6.00	\$0.55	\$31.21	\$12.02	38%
Bellsouth	LA	\$21.91	\$0.42	\$6.00	\$1.00	\$29.33	\$4.65	16%
Nynex Svc Co	MA	\$23.77	\$0.00	\$6.00	\$1.10	\$30.88	\$6.16	20%
Bell Atlantic	MD	\$23.80	\$0.16	\$5.68	\$1.96	\$31.60	\$7.98	25%
Nynex Svc Co	ME	\$20.00	\$0.84	\$6.00	\$0.87	\$27.70	\$5.62	20%
Ameritech	MI	\$24.18	\$0.00	\$5.34	\$1.11	\$30.63	\$16.74	55%
Us West	MN	\$21.82	\$0.00	\$4.89	\$1.36	\$28.07	\$4.18	15%
Southwestern Bell	MO	\$18.27	\$0.13	\$5.27	\$2.51	\$26.17	\$6.34	24%
Bellsouth	MS	\$27.59	\$8.21	\$6.00	\$0.53	\$42.34	\$16.65	39%
Us West	MT	\$23.53	\$2.67	\$6.00	\$4.14	\$36.33	\$3.72	10%
Bellsouth	NC	\$18.21	\$0.00	\$6.00	\$1.11	\$25.31	\$3.23	13%
Us West	ND	\$25.68	\$0.39	\$6.00	\$2.57	\$34.64	\$3.77	11%
Us West	NE	\$27.33	\$0.00	\$5.16	\$1.85	\$34.33	\$6.15	18%
Nynex Svc Co	NH	\$19.64	\$0.15	\$6.00	\$2.27	\$28.06	\$4.68	17%
Bell Atlantic	NJ	\$16.99	\$0.08	\$5.35	\$5.63	\$28.05	\$13.81	49%
Us West	NM	\$19.83	\$0.38	\$6.00	\$5.16	\$31.37	\$4.12	13%
Pacific Telesis	NV	\$14.94	\$0.83	\$5.37	\$2.09	\$23.23	(\$7.05)	-30%
Nynex Svc Co	NY	\$23.47	\$0.17	\$6.00	\$1.95	\$31.58	\$13.47	43%
Ameritech	OH	\$20.78	\$0.00	\$5.38	\$1.06	\$27.22	\$13.38	49%
Southwestern Bell	OK	\$20.66	\$0.32	\$5.27	\$1.36	\$27.62	\$4.38	16%
Us West	OR	\$22.28	\$0.12	\$6.00	\$1.72	\$30.12	\$7.37	24%
Bell Atlantic	PA	\$17.26	\$0.00	\$6.00	\$2.46	\$25.71	\$5.24	20%
Nynex Svc Co	RI	\$18.03	\$0.01	\$6.00	\$1.14	\$25.19	\$5.67	22%
Bellsouth	SC	\$23.33	\$0.54	\$6.00	\$1.77	\$31.64	\$6.74	21%
Us West	SD	\$22.90	\$0.04	\$6.00	\$3.13	\$32.07	(\$2.75)	-9%
Bellsouth	TN	\$22.11	\$0.20	\$6.00	\$0.70	\$29.00	\$8.75	30%
Southwestern Bell	TX	\$19.96	\$0.00	\$5.27	\$3.17	\$28.40	\$7.66	27%
Us West	UT	\$21.38	\$0.15	\$6.00	\$1.92	\$29.45	\$10.44	35%
Bell Atlantic	VA	\$20.88	\$0.39	\$6.00	\$3.21	\$30.48	\$7.40	24%
Nynex Svc Co	VT	\$21.12	\$3.29	\$6.00	\$2.73	\$33.15	\$9.20	28%
Us West	WA	\$18.80	\$0.00	\$5.92	\$2.19	\$26.90	\$6.97	26%
Ameritech	WI	\$20.85	\$0.00	\$5.06	\$0.76	\$26.67	\$5.68	21%
Bell Atlantic	WV	\$35.51	\$4.81	\$6.00	\$2.56	\$48.88	\$3.24	7%
Us West	WY	\$34.33	\$7.68	\$6.00	\$0.81	\$48.83	\$18.64	38%